Eimeria spp. in Naturally Infected Calves

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Abstract : Bovine coccidiosis is a protozoan disease caused by various species of Eimeria and most signs of disease are chronic or subclinical. The aim of this study was to determine the prevalence of Eimeria spp. in calves in Konya, in Turkey. The study, conducted from January- February 2015, involved 240 faecal samples of calves in the age groups of <1 month, 1-3 months and >3 months in Konya city centre, in Turkey. In a retrospective study from these faecal samples of calves submitted to the University of Selcuk, Faculty of Veterinary Medicine, Laboratory of Parasitology were evaluated regarding the prevalence of Eimeria spp. Faecal samples were examined by Fulleborn saturated salt floatation technique. Eimeria oocysts were found in 8.33% of all samples. The positivity rates in each of the age groups were different. According to the age groups (<1 month, 1-3 months and >3 months), the Eimeria spp. were determined as 0.83, 22.73 and 7.41%, respectively. After examination of stool, detected oocysts were sporulated in 2.5% potassium dichromate at 22° C and species were identified as E. cylindrica, E. zuernii, E. ellipsoidalis, E. subspherica, E. bovis, E. auburnensis, E. canadensis, E. illinoisensis and E. brasiliensis in infected calves. In conclusion, the highest prevalence was observed in the age group of 1-3 months. The presence of Eimeria species in calves demonstrated for the first time in the Konya region in Turkey. Other etiologic agents should also be investigated in calves more seriously. Further molecular epidemiological studies should be performed in this community.

Keywords: Eimeria spp., calves, diarrhea, bovine coccidiosis

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